

HIGH-GAIN CONFORMAL ARRAY ANTENNA

ABSTRACT OF THE DISCLOSURE

An antenna array system comprising a plurality of antenna elements organized in an array and configured to form a non-planar shaped antenna array surface. The antenna array system further comprises switching circuitry configured to switch each of the plurality of antenna elements on or off based on control signals. In one embodiment, the antenna array system is configured such that the antenna beam direction can be steered in a first direction by switching on a first set of antenna elements, and the antenna beam direction can be steered in a second direction by switching on a second set of antenna elements. In one embodiment, the second set of antenna elements can include one or more antenna elements from the first set of antenna elements, or the second set of antenna elements may not include any antenna elements from the first set.

DE 7104279 v4